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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,970	10/04/2001	Philip J. Gentile	15436.1	4553

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EXAMINER	
PAYNE, DAVID C	

ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/971,970	GENTILE, PHILIP J.	
	Examiner	Art Unit	
	David C. Payne	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-12,14-18 and 20-22* is/are rejected.

7)☒ Claim(s) *5,13,19,23 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2 and 3*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-12, 14-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoll US 6,236,478 B1 (Stoll) in view of Roberts et al. US 6,522,436 B2 (Roberts).

Regarding claims 1, 6, 9, 14-15, 20, 21 and 25 Stoll disclosed

An optical channel analyzing switch for selecting from among a first plurality of channels, comprising:

an optical coupler (K of Figure 1) for each of said first plurality of channels to receive an input optical signal and generate a pass-through output optical signal and an analyzable output optical signal;

a receiver for each of said first plurality of channels coupled to receive said analyzable output optical signal and to convert said analyzable output optical signal into an analyzable electrical signal (SA);

a multiplexor coupled at a plurality of multiplexor inputs to each of said analyzable electrical signals, said multiplexor to select a multiplexor output from one of said analyzable electrical signals (AS);

Stoll does not disclose a

a retimer coupled at said multiplexor output for generating a retimed data signal from said one of said analyzable electrical signals;

and a transmitter for converting said retimed data signal such that said retimed data signal approximates said input optical signal and complies with input signal requirements of a network analyzer to which the retimed data signal is to be transmitted.

Roberts disclosed a clock recovery (16 of Figure 1) at the output of a multiplexer. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the data recovery function of Roberts with the Stoll invention so as to realign the data for transmission downstream.

Regarding claim 21, 22, 26

The modified invention of Stoll and Roberts does not disclose performing the analysis function of reduced noise. However, it would have been obvious to one of ordinary skill in the art at the time of invention that the spectrum analyzer and error detection circuits would reduce noise since noise is a principal measurement in signal quality as measured by Stoll.

Regarding claim 2, 16

The modified invention of Stoll and Roberts further disclose The optical channel analyzing switch wherein said retimer comprises: a clock recovery circuit for recovering said clock signal from said one of said analyzable electrical signals at said multiplexor output and generating a clock signal and a data signal therefrom; at least one reference clock for

providing a reference clock to said clock recovery circuit; and a flip-flop for receiving said clock signal and said data signal and generating said retimed data signal.

(col./line: 9/25-30)

Regarding claim 3, 17

The modified invention of Stoll and Roberts does not disclose wherein said at least one reference clock is user selectable from among a plurality of frequencies. However, Roberts does disclose a plurality of clock frequencies that are used to interpolate different clock signals. It would have been obvious to one of ordinary skill in the art at the time of invention to make the plurality of clock frequencies user selectable in order to make the device operate in a plurality of environments since it is well known that systems operate at different clock rates.

Regarding claim 4, 12, 18

The modified invention of Stoll and Roberts does not disclose the optical channel analyzing switch, wherein said reference clock operates at one of a frequency compatible with Gigabit Ethernet and Fiber Channel frequencies. However Roberts disclosed 1GHz clock rates (col./line: 2/10-15). It would have been obvious to one of ordinary skill in the art at the time of invention to use the modified invention in the Gigabit Ethernet and Fiber Channel environments since these technologies are compatible with 1 GHz rates.

Regarding claims 7, 8, 10-11

The optical channel analyzing switch, as recited in claim 1, wherein the transmitter converts said retimed data signal such that said retimed data signal retains its electrical form and is transduced to comply with the input signal requirements of the network analyzer (Figure 8, output bit)

Allowable Subject Matter

3. Claims 5, 13, 19, 23, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp

David C. Payne
Patent Examiner
AU 2633